SENSOR | OQSX-G2

Product No.: OQSXG2-1-DD-02-5

TANDELTA
Oil Condition Monitoring

PRODUCT DESCRIPTION

OQSx-G2 is the world's most advanced real-time oil condition sensor delivering unique insight into the status of your equipment, enabling significant operating cost reductions through maintenance optimisation, advanced fault detection and reduced waste.

OQSx-G2 is powered by our proprietary FSH™ core technology which combines real time oil condition analysis with data analytics. The electro-chemical properties of oil are continuously analysed to an accuracy of 0.001% generating high quality raw data, which is then processed using our advanced analytics. This enables OQSx-G2 to accurately detect and measure all wear, contamination and failure modes and reliably inform you when equipment requires maintenance.

OQSx-G2 can be easily installed on any equipment, operating in any environment, with any oil type.

KEY FEATURES

- **FULL SPECTRUM HOLISTIC (FSH™)**

Unique capability to detect and measure all and any wear and contamination - water, acid, fuel, viscosity, different oil types, carbon, particles etc.

- **ANALYSIS ACCURACY**

FSH technology analysis, detects and measures changes in the electro-chemical properties of live oil in real time down to 0.001% (10ppm) change sensitivity. Unmatched raw data quality.

- **REAL-TIME**

Continuously analyses and reports oil condition on operating equipment and reports oil condition every seconds.

- **ROBUST & RELIABLE**

Proven around the world for use in even the most extreme industrial and commercial applications.

- **EASY TO INSTALL**

Quick and easy to install on any equipment with plug & play integration with any existing data reporting and display systems.

BENEFITS

Tan Delta advanced oil condition monitoring provides a new level of equipment condition insight resulting in reduced operating and ownership costs through a combination of, optimised maintenance scheduling, advanced fault detection, longer equipment life and reduced waste.

- **MAINTENANCE OPTIMISATION**

Eliminate unnecessary time based maintenance, through optimised maintenance scheduling according to actual equipment need and maintenance condition.

- **ADVANCED FAULT DETECTION**

Detect early signs of issues before equipment damage to enable pre-emptive maintenance and reduce breakdowns.

- **ENVIRONMENTAL (ESG)**

Reduce waste, extend equipment life, increase equipment productivity and efficiency. Reduce carbon footprint.

ESG

TECHNICAL DATA

PRODUCT INFORMATION

Name	Gen 2 - Oil Quality Sensor
Product Number	OQSxG2-1-DD-02-5

PHYSICAL

Material	Stainless Steel AISI304
Dimensions	102mm x 36mm (L x W)
Weight	180g
Connection	32mm AF Hex Collar
Torque	25N·m

AVAILABLE THREADS

Thread	Seal
1/2" BSPP	Dowty Type
1/2" NPT	n/a
7/8" UNF	'O' Ring
M18	Dowty Type

(Alternative threads available upon request)

CONNECTIONS

Connector	6 pin Bulgin 4000 series

ELECTRICAL

Supply	+9-30 V DC
Consumption	0.4w Average

DATA OUTPUT/INPUT

Digital Output	RS485, CANbus
Protocols Supported	Modbus, CanOpen and J1939
Analog Output	4-20mA

OIL QUALITY DETECTION PARAMETERS

Frequency	Every 2 seconds
Output	Tan Delta Number (TDN) Oil Temperature (C or F)
Sensitivity / Accuracy	0.001%, +/-0.5%
Elements	All wear and contamination

OIL TYPE

Configuration	Any mineral, semi-synthetic or synthetic oil, including fuels (diesel & bio-diesel)

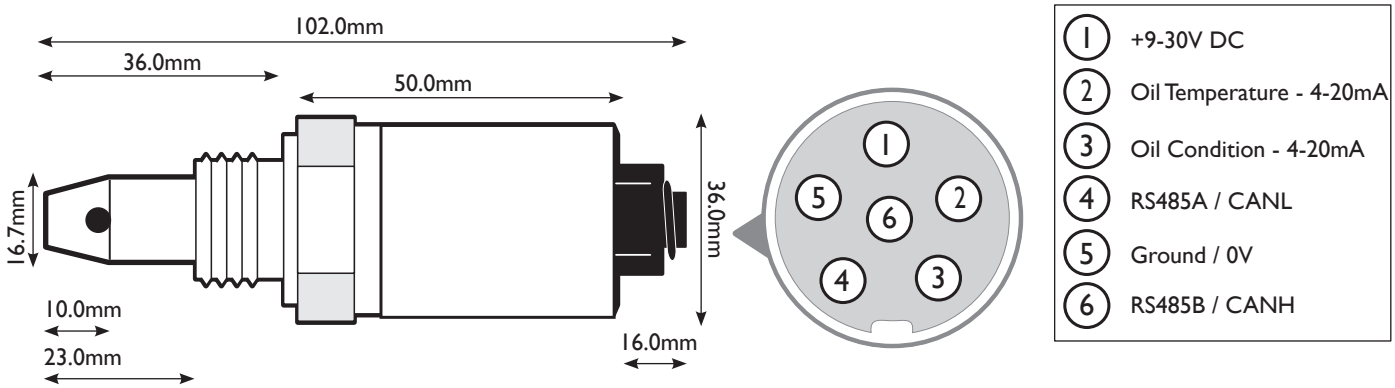
ENVIRONMENTAL

Operating Temperature	-40°C (-40°F) to +120°C (+248°F)
Calibrated Temperature	-20°C (-4°F) to +120°C (+248°F)
Fluid Temperature	-40°C (-40°F) to +120°C (+248°F)
Fluid Pressure	up to 70 bar (1015 psi)
Storage Temperature	-55°C (-67°F) to +150°C (+302°F)

STANDARDS & CERTIFICATION

Water & Dust	IP68 when connected
Shock & Vibration	BS EN 60068-2-30 (Test Db - Cyc.Hum.) BS EN 60068-2-6 (Test Fc - Sine Vib.) BS EN 60068-2-27 (Test Ea - Mech. Shock)
EMC	EN 61000-6-4:2007 (Generic Emissions Standard for Industrial Environments) EN 61000-6-2:2005 (Generic Immunity Standard for Industrial Environments)
Conformity	CE Marked RoHS Compliant

DIMENSIONS & CONNECTION



WHY TAN DELTA

Tan Delta's advanced real-time oil condition monitoring is used by equipment owners around the world to improve reliability and reduce costs. Our core FSH technology delivers exceptional real-time oil analysis and condition insight. From wind turbines and ships to mining trucks and railways, Tan Delta real-time oil condition monitoring solutions are proven to deliver substantial operational and financial benefits. Our products are easy to install and use on any equipment and are fully supported by our dedicated support team.

OEM

Tan Delta provide OEM equipment manufacturers with fully customised integrated and cost optimised solutions. Please contact us directly to discuss your oil condition requirements.

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